Listing of Claims

Please cancel claims 1-4, 12, 13, 15-18 and 20, and please amend claims 29, 40, 44, 47, 51, 54-58, 61, 62, 65 and 67. This listing of claims will replace all prior versions and listings of claims in the instant application.

1 – 28 (Cancelled)

29. (Currently Amended) A multi-domain fusion protein expression cassette, comprising a promoter operably linked to a nucleic acid molecule that encodes a fusion protein, wherein the encoded fusion protein comprises a structure of ~~[(cleavage site)-(indolicidin analog)-(cleavage site)-(anionic spacer peptide)]$_n$~~ [(cleavage site)-(cationic peptide)-(cleavage site)-(anionic spacer peptide)]$_n$ with *n* being an integer having a value between 1 and 40, and wherein the ~~indolicidin analogs retain~~ cationic peptides have at least 30% tryptophan and have antimicrobial activity.

30. (Cancelled)

31. (Previously Presented) The expression cassette according to claim 29 wherein the promoter is selected from the group consisting of *lacP* promoter, *tacP* promoter, *trcP* promoter, *srpP* promoter, SP6 promoter, T7 promoter, *araP* promoter, *trpP* promoter, and λ promoter.

32. (Previously Presented) The expression cassette according to claim 55 wherein the carrier is selected from cellulose binding domain, glutathione-S-transferase, outer membrane protein F, β-galactosidase, protein A, or IgG-binding domain.

33 – 34 (Cancelled)

35. (Previously Presented) The expression cassette according to claim 55 wherein the carrier is less than 100 amino acid residues in length.

36. (Previously Presented) The expression cassette according to claim 35 wherein the carrier is a truncated cellulose binding domain.

37. (Previously Presented) The expression cassette according to claim 29 wherein the anionic spacer has no cysteine residue.

38 – 39 (Cancelled)

40. (Currently Amended) The expression cassette according to claim 29 wherein the cumulative charge of the anionic spacer peptide reduces the cumulative charge of the ~~indolicidin analog~~ cationic peptide.

41. (Previously Presented) The expression cassette according to claim 29 wherein *n* has a value of between 5 and 30.

42. (Previously Presented) The expression cassette according to claim 29 wherein *n* has a value of between 10 and 20.

43. (Cancelled)

44. (Currently Amended) The expression cassette according to ~~any one of claims 1 or 29~~ claim 29 wherein the ~~indolicidin analog~~ cationic peptide has up to 35 amino acids comprising the sequence of SEQ ID NO:35 or SEQ ID NO:36.

45. (Previously Presented) The expression cassette according to claim 29 wherein the cleavage site can be cleaved by low pH or by a reagent selected from cyanogen

bromide, N-chlorosuccinimide, 2-(2-nitrophenylsulphenyl)-3-methyl-3'-bromoindolenine, hydroxylamine, *o*-iodosobenzoic acid, Factor Xa, Factor XIIa, thrombin, enterokinase, collagenase, *Staphylococcus aureus* V8 protease, endoproteinase Glu-C, endoproteinase Arg-C, endoproteinase Lys-C, chymotrypsin, trypsin, or a combination thereof.

46. (Cancelled)

47. (Currently Amended) A recombinant host cell comprising the expression cassette according to any one of claims 29, 37, 41, ~~or~~ and 42.

48. (Previously Presented) The recombinant host cell of claim 47 wherein the host cell is a yeast, a fungus, a bacteria or a plant cell.

49. (Previously Presented) The recombinant host cell of claim 48 wherein the bacteria is *Escherichia coli*.

50. (Previously Presented) A method of producing a fusion, comprising culturing the recombinant host cell of claim 47 under conditions and for a time sufficient to produce the fusion protein.

51. (Currently Amended) The expression cassette according to ~~any one of claims 1, 2, 29, or 54~~ claim 29 or claim 54 wherein the expression cassette is contained in an expression vector.

52. (Cancelled)

53. (Previously Presented) The recombinant host cell of claim 47 wherein the expression cassette is contained in an expression vector.

54. (Currently Amended) The expression cassette according to claim 29 further consisting of one additional ~~indolicidin analog~~ cationic peptide or two additional ~~indolicidin analogs~~ cationic peptides, wherein the additional ~~analog or analogs~~ peptide or peptides are at the carboxy-terminus of the encoded fusion protein.

55. (Currently Amended) The expression cassette according to ~~any one of claims~~ claim 29 or claim 54 further comprising a carrier amino acid sequence wherein the carrier amino acid sequence is at the amino-terminus of the encoded fusion protein.

56. (Currently Amended) The expression cassette according to ~~any one of claims 1, 29, or 54~~ claim 29 or claim 54 wherein the ~~indolicidin analog~~ cationic peptide is SEQ ID NO:36.

57. (Currently Amended) The expression cassette according to claim 55 wherein the ~~indolicidin analog~~ cationic peptide is SEQ ID NO:36.

58. (Currently Amended) The recombinant host cell according to claim 53 wherein the encoded ~~indolicidin analog~~ cationic peptide fusion protein is expressed as an insoluble protein.

59. (Previously Presented) A recombinant host cell comprising the expression cassette according to claim 57 wherein the expression cassette is contained in an expression vector.

60. (Previously Presented) A recombinant host cell comprising the expression cassette according to claim 58 wherein the expression cassette is contained in an expression vector.

61. (Currently Amended) The recombinant host cell according to claim 59 wherein the encoded ~~indolicidin analog~~ cationic peptide fusion protein is expressed as an insoluble protein.

62. (Currently Amended) The recombinant host cell according to claim 60 wherein the encoded ~~indolicidin analog~~ cationic peptide fusion protein is expressed as an insoluble protein.

63. (Previously Presented) A method of producing a fusion protein, comprising culturing a recombinant host cell according to claim 59 under conditions and for a time sufficient to produce said fusion protein.

64. (Previously Presented) A method of producing a fusion protein, comprising culturing a recombinant host cell according to claim 60 under conditions and for a time sufficient to produce said fusion protein.

65. (Currently Amended) The method according to claim 63 wherein the fusion protein is further cleaved at the cleavage sites to release the ~~indolicidin analogs~~ cationic peptides from the anionic spacers.

66. (Previously Presented) The method according to claim 65 wherein the fusion protein is cleaved by endoproteinase Lys-C.

67. (Currently Amended) The method according to claim 65 wherein the released ~~indolicidin analogs~~ cationic peptides are further amidated at the carboxy-terminus.